

NTSB Order No. EA-4717

UNITED STATES OF AMERICA  
NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD  
at its office in Washington, D.C.  
on the 29th day of October, 1998

JANE F. GARVEY,  
Administrator,  
Federal Aviation Administration,

Complainant,

CHRISTIAN J. CHANDLER,

Respondent .

Docket No. SE-14270

## OPINION AND ORDER

The respondent has appealed from the oral initial decision of Administrative Law Judge William E. Fowler, Jr., rendered in this proceeding at the conclusion of an evidentiary hearing held on March 13, 1996.<sup>1</sup> The law judge affirmed the Administrator's order suspending respondent's airline transport pilot certificate on allegations of violations of Sections 91.13(a), 91.303(d), and 91.9(a) of the Federal Aviation Regulations (FAR), 14 C.F.R. Part

<sup>1</sup>An excerpt from the hearing transcript containing the initial decision is attached.

91, as a result of his alleged performance of aerobatic maneuvers in a Beechcraft King Air aircraft within four nautical miles of the center line of a Federal airway, and contrary to the operating limitations of that aircraft.<sup>2</sup> The law judge modified the sanction from a 90-day suspension to a 60-day suspension of respondent's certificate. The Administrator has not appealed the sanction modification.

Respondent raises several issues on appeal. He attacks the law judge's credibility findings in favor of the Administrator's witnesses. He argues that the law judge relied on inaccurate information concerning the operating limitations of the aircraft. Finally, respondent contends that for purposes of skydiving

---

<sup>2</sup>FAR §§ 91.13(a), 91.303(d), and 91.9(a) provide in pertinent part as follows:

**§ 91.13 Careless or reckless operation.**

(a) *Aircraft operations for the purpose of air navigation.* No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

**§ 91.303 Aerobatic flight.**

No person may operate an aircraft in aerobatic flight....

(d) Within 4 nautical miles of the center line of any Federal airway....

For purposes of this section, aerobatic flight means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.

**§ 91.9 Civil aircraft flight manual, marking, and placard requirements.**

(a) Except as provided in paragraph (d) of this section, no person may operate a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual, markings, and placards....

operations, his flight was not aerobatic.<sup>3</sup> The Administrator has filed a brief in reply. For the reasons that follow, we grant respondent's appeal.

The incident described in the Administrator's complaint occurred on a Sunday, at Orange County Airport, New York. FAA Inspector Raymond Fischer, an operations inspector assigned to the Teterboro, New Jersey Flight Standards District Office (FSDO), testified that on the day in question he was visiting his brother, whose business is located at Orange County Airport. While there, Fischer testified, he observed respondent operate a King Air aircraft for a skydiving operation that is also located at the airport. Inspector Fischer testified that with regard to the subject flight,<sup>4</sup> he observed the aircraft take off, and, he claims, he never lost sight of the aircraft. After the aircraft reached an altitude of about 14,000 feet, he testified, it appeared to almost stop. The aircraft then went into a very abrupt left turn and a very steep, spiraled descent. Inspector Fischer testified that the aircraft banked between 70 and 90

---

<sup>3</sup>The United States Parachute Association has filed an *amicus curiae* brief in support of respondent's appeal which has been accepted and considered by the Board.

<sup>4</sup>Respondent had apparently already taken two loads of jumpers up prior to the flight which gave rise to this complaint. Between these flights, Fischer performed a ramp-check of the aircraft, and he grounded it based on his belief that it could not be operated with the door removed. After conferring with his supervisor, Inspector Fischer learned that the aircraft was properly configured for a skydiving operation and respondent resumed jump operations. We find these circumstances revealing. Inspector Fischer appears to lack expertise on the subject of skydiving operations. See *infra*, n.9. We also think it is unlikely that a highly experienced pilot such as respondent would knowingly violate the FAR in the presence of an FAA Inspector.

degrees when it made the left turn, and he calculated the descent rate for that turn at 5,800 feet per minute. According to Inspector Fischer, neither a bank angle that exceeds 45 degrees or a descent rate in a King Air that exceeds 4,000 feet per minute are normal.<sup>5</sup> Therefore, he opined, respondent's maneuvers were not necessary for normal flight and the maneuvers were, in his opinion, aerobatic. The flight manual for this aircraft prohibits acrobatic maneuvers.

Raymond Mueller is an air traffic control specialist with the New York TRACON. His duties involve the use of the automated radar terminal system (ARTS). According to Mueller, ARTS can provide, among other things, the altitude and ground speed of an aircraft, and it can be used to determine an aircraft's track. Mueller prepared a continuous data recording (CDR) printout recorded by ARTS during respondent's operation, at the request of Inspector Fischer. See Exhibit A-2. Mueller explained that the CDR printout shows a radar sweep approximately every 4.6 seconds. Between 19:48:23.556 and 19:48:28.220, Mueller noted, respondent began to make a turn while descending from an altitude of 13,200 feet to an altitude of 11,600 feet. Mueller calculated that at that moment respondent was descending at a rate of 8,000 feet per

---

<sup>5</sup>Inspector Fischer proffered in support of this proposition a document he obtained from the aircraft manufacturer showing that normal production King Air aircraft do not have vertical speed indicators that register descents exceeding 4,000 feet per minute. This document fails to establish, as the law judge was apparently led to believe, that 4,000 feet per minute is the "maximum rate" permissible for descents in a King Air. *See Initial Decision* at 309.

minute.<sup>6</sup> Between 19:48:23.620 and 19:48:50.560, respondent turned his aircraft 182 degrees. According to Mueller's calculations, respondent's rate of turn was then 9.4 degrees per second. Mueller, a private pilot, testified that a normal rate of turn is 3 degrees per second, which would render a bank angle of 15 degrees. He estimates that after taking into account the wind component and the track of respondent's aircraft, respondent's angle of bank was at least 30 degrees, and perhaps as great as 45 degrees. The CDR printout also shows that, between 19:48:23.620 and 19:48:28.220, the aircraft's speed remained at 60 knots, which is consistent, according to Mueller, with a very steep pitch. Mueller testified that he could not, however, verify Inspector Fischer's observations of spirals, because such maneuvers cannot be established with certainty by ARTS. The CDR printout shows that the maneuvers occurred within 4 nautical miles of the center line of a Federal airway.

Respondent denies that he performed aerobatic maneuvers. He admits that his bank angle for his first left turn may have been as much as 45 degrees and that his pitch was 15 to 20 degrees, but he points out that there are no bank limitations or rate of descent limitations in the aircraft flight manual, nor are such limitations set forth in the FAR.<sup>7</sup> Moreover, respondent asserts,

---

<sup>6</sup>Curiously, in upholding the violations, the law judge cites Mueller's calculations as to rate of descent during the left turn (8,000 feet per minute) instead of Fischer's calculations (5,800 feet per minute), and Fisher's highest estimate of angle of bank (90 degrees) based on his observations, instead of Mueller's calculations (30-45 degrees).

<sup>7</sup>Respondent also testified that by Army definition, a bank  
(continued...)

Inspector Fischer could not have possibly been able to determine the pitch or attitude of his aircraft at 14,000 feet, and he suggests that Fischer must, therefore, be lying.<sup>8</sup> In any event, according to respondent and his expert witnesses, respondent's maneuvers were "absolutely normal" for a skydiving operation.

These proceedings have been affected, not favorably, by the insinuations of respondent's witness Bagley, which are carried forward in the *amicus* brief filed by the United States Parachute Association, concerning the somewhat curious facts surrounding the complaint before us: surveillance of parachute operations was not a programmed work item for Inspector Fischer. He was off duty, it was a Sunday, and he was visiting the airport-based enterprise of his brother in Orange County where, he had heard, according to his testimony, that there might be problems with jumpers in the landing pattern. The Parachute Association is of the opinion that the Teterboro FSDO is an adversary, not inclined to enter cooperative dialogue on safety issues affecting jump operations. While the suspicions that are raised are not surprising, there is little to suggest any real issue with the Teterboro FSDO, and respondent's contention that the inspector who initiated the action is fabricating his testimony is refuted by the CDR printout which, while not necessarily proving the allegations, in our view, does suggest that respondent's

---

(..continued)

angle exceeding 60 degrees is aerobatic.

<sup>8</sup>We will not consider the distance calculations appended to respondent's appeal brief since they were not offered to the law judge for his consideration, and they are not a part of the  
(continued...)

maneuvers may have seemed aggressive to a person who is not an expert in skydiving operations.<sup>9</sup>

The only issue that remains is whether, as respondent and the Parachute Association suggest, skydiving operations warrant different treatment under the FAR than operations of similar aircraft under other circumstances. The Administrator's case is completely lacking in any comparative judgment about typical skydiving operations. As we have noted, we find Inspector Fischer unqualified to offer any such judgment himself, and the Administrator is apparently content to rest on the proposition that what is normal for point-to-point flight will also be considered normal for jump operations and, it also appears, for agricultural spraying.<sup>10</sup> No systematic appraisal of jump operations was offered, despite the fact that this case could

---

(..continued)  
evidentiary record.

<sup>9</sup>At hearing, respondent challenged FAA's offer of Inspector Fischer as an expert, both as to the King Air [while he has many hours in this aircraft, he has not operated one in 20 years] and as to jump operations [with which he has little experience]. The ALJ initially ruled Inspector Fischer to be lacking in the necessary qualifications, but then changed his mind, finding Fischer to be qualified as an expert in general aviation, "perhaps not in parachute jumping." TR-20. More precision is demanded. We would not find Inspector Fischer qualified in jump operations, and note that he was even unaware of the fairly common use of the King Air as a jump aircraft. TR-18.

<sup>10</sup>One of respondent's witnesses testified that the normal flight characteristics of an agricultural spraying operation include ascents out of the field that are almost vertical, and very steep banks, and he testified that such maneuvers are not aerobatic. TR-244. The Administrator asserts in her reply brief at 27, "It appears...[he]...is saying that although the aircraft [used in agricultural spraying operations] are placarded against...aerobatics, that people routinely ignore the placards....If this is true, then they are also violating the regulations as they exist today."

become precedent setting, interpreting a broadly-worded provision of the FAR to mean, in short, that all flying is the same.

Indeed, the Administrator presented a case through testimony and exhibits that can be understood to say that high descent rates in combination with bank angles of 45 degrees (three times the so-called standard) is likely to be considered aerobatic flying.

Respondent presented testimony of pilots experienced in skydiving operations. They testified that once skydivers have been discharged from the aircraft the pilot must turn his aircraft sharply away, so that the pilot is able to keep continuous watch of the skydivers during the descent. We think this testimony may well accurately reflect skydiving practice, and we find no evidence in the record to suggest that the Administrator disagrees. Respondent and one of his witnesses also testified that the pilot should then descend rapidly and land the aircraft before the skydivers land. Although no explanation is offered, there is nothing in the record to suggest that a rapid descent is necessarily inappropriate.

Since the operating limitations of a King Air prohibit the performance of aerobatic maneuvers, a finding of a violation of FAR § 91.303 rests on our deference to the Administrator's position that the maneuvers involved here were not necessary for "normal" flight. Under the FAA Civil Penalty Administrative Assessment Act, 49 U.S.C. §§ 44709(d)(3), the Board is "bound by all validly adopted interpretations of law and regulations" of the Administrator, unless we find that such interpretation is "arbitrary, capricious, or otherwise not in accordance with law."



In Administrator v. Couch, NTSB Order No. EA-3655 (1992), the Board considered whether a predecessor regulation that prohibited aerobatic flight, FAR § 91.71, was so vague that it should not be enforced. The Administrator's position in that case was that the regulation was purposefully vague, because specificity, i.e., defined, specific degrees of pitch or bank, would be unnecessary and undesirable, given the wide variation in aircraft and their design capabilities. *Id.* at 7. In the case at hand, however, the Administrator appears to take a different position, asserting for the first time, to the best of our knowledge, that regardless of the type of aircraft or type of operation, what is "normal" flight for one aircraft is "normal" flight for every other aircraft, in every situation, and that high descent rates combined with bank angles that exceed 45 degrees are always aerobatic.

It is certainly the prerogative of the Administrator to define FAA regulations by adjudication, and if the Administrator intended by this complaint to address a safety issue to an entire industry, it is not our intent, by this decision, to intrude on that exercise of authority. However, to find a violation in this case, we need an understanding, if not a definition, of aerobatic flight. We are unable to reach that understanding in this case because the FAA failed to lay an adequate evidentiary foundation due to the lack of expertise by the FAA's primary witness, the conflicting testimony as to what constitutes aerobatic flight (and unexplained inconsistencies with existing FAA guidance), the questionable although apparently widely practiced abrupt

maneuvering represented as "normal" for parachute jumping operations, and the lack of specificity in the King Air flight manual regarding prohibited aerobatic flight. Without this basis, we cannot begin to address how respondent's flight may or may not have violated the proscribed aerobatics, and we therefore decline to do so.

**ACCORDINGLY, IT IS ORDERED THAT:**

1. Respondent's appeal is granted; and
2. The Administrator's order is dismissed.